

Work Order ID 107337

September-23-13 11:48:22 AM

646.3715

B107337

\*107337\*

Page 1

Item ID: 646.3715

Accept

\*N900040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Strut Doubler

Start Date: 9/23/13 Start Qty: 2.00

\*2\* \*8\*

Cust Item ID:

Required Date: 9/23/13 Req'd Qty: 2.00

Customer:

Reference:

Approvals: Process Plan: MLJ Date: 13-09-25 Tooling: \_\_\_\_\_ Date: \_\_\_\_\_

Run Start \*NR1\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Stop \*NR2\*

| Sequence ID/<br>Work Center ID | Operation<br>Description | Set Up/<br>Run Hours | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
|--------------------------------|--------------------------|----------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|

| Draw Nbr | Revision Nbr |
|----------|--------------|
|----------|--------------|

|          |   |
|----------|---|
| 646.3700 | A |
|----------|---|

0.00

\*110\*

Waterjet

FLOW CNC Waterjet

Memo

1-Cut as per Dwg

Dwg Rev: A

Prog Rev: A

2-Deburr if necessary

0.00

8 0 Ac  
13.11.02

120

QC2- Inspect parts off machine FAI/FAIB

0.00

\*120\*

QC

Quality Control

Memo

0.00

8 0 Ac  
13.11.02

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Misabeled                       |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Work Order ID 107337

\*107337\*

Page 2

September-23-13 11:48:22 AM

Item ID: 646.3715 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Strut Doubler  
 Start Date: 9/23/13 Start Qty: 2.00 \*2\* Cust Item ID:  
 Required Date: 9/23/13 Req'd Qty: 2.00 \*2\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

| Sequence ID/<br>Work Center ID                            | Operation<br>Description   | Set Up/<br>Run Hours       | Tool ID | Tool # | Plan<br>Code | Accept<br>Qty | Reject<br>Qty | Reject<br>Number | Insp.<br>Stamp |
|---|--|----------------------------|---------|--------|--------------|---------------|---------------|------------------|----------------|
| 130<br>*130*<br>QC<br>Quality Control                     | QC8- Inspect parts - second check<br><br>Memo  | 0.00<br>DAS<br>0.00 137104 |         |        |              | 8             |               |                  |                |
| 140<br>*140*<br>Outsource4<br>Outsource process - Anodize | Outsource process-Anodize per QSI017 4.1.10.1<br><br>Memo<br>Issue P/O to ATG : 21915<br><br>1- Black Anodize as per Dwg 646.3700<br><br>2- PRIME AS PER DWG, SEE NOTE #2<br><br>Certification of Comformity is required | 0.00<br><br>0.00           |         |        |              |               |               | CZ13/11/08       | 8              |
| 150<br>*150*<br>Packaging<br>Packaging                    | Receive & Inspect for Damage & Mat'l Certs<br><br>Memo   | 0.00<br><br>0.00           |         |        |              |               |               |                  | 13/11/08 (8)   |

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause                             | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|--|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling <input type="checkbox"/> |      |      |     |   |                   |                    |             |              |              |
| Operator <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Material <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Setup <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Other <input type="checkbox"/>         |      |      |     |   |                   |                    |             |              |              |
| Process <input type="checkbox"/>       |      |      |     |   |                   |                    |             |              |              |
| Supplier <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Training <input type="checkbox"/>      |      |      |     |   |                   |                    |             |              |              |
| Unapproved <input type="checkbox"/>    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

|   |   |   |
|---|---|---|
| <b>Landing Gear</b><br><input type="checkbox"/> Bending<br><input type="checkbox"/> Centre Not Concentric to O/S<br><input type="checkbox"/> Cracks<br><input type="checkbox"/> Crushed/Crimped<br><input type="checkbox"/> Cuffs<br><input type="checkbox"/> Heat Treat<br><input type="checkbox"/> Inspection Strip in Tube<br><input type="checkbox"/> Ripples in Bend<br><input type="checkbox"/> Torque Waves in Extrusion<br><input type="checkbox"/> Turning Sequence<br><input type="checkbox"/> Wave/Twist in Tube | <b>General</b><br><input type="checkbox"/> Bend<br><input type="checkbox"/> BOM/Route<br><input type="checkbox"/> Broken/Damaged<br><input type="checkbox"/> Burrs<br><input type="checkbox"/> Contamination<br><input type="checkbox"/> Countersink<br><input type="checkbox"/> Cut Too Short<br><input type="checkbox"/> Drill Holes<br><input type="checkbox"/> Drawing<br><input type="checkbox"/> Finish<br><input type="checkbox"/> Folio | <input type="checkbox"/> Grain<br><input type="checkbox"/> Hardware<br><input type="checkbox"/> Inspection Incomplete<br><input type="checkbox"/> Instructions Incomplete/Unclear<br><input type="checkbox"/> Maintenance<br><input type="checkbox"/> Mislabeled<br><input type="checkbox"/> Misread<br><input type="checkbox"/> Offset<br><input type="checkbox"/> Out of Calibration<br><input type="checkbox"/> Out of Sequence<br><input type="checkbox"/> Outside Dimensions |
|---|---|---|

|  |   |
|--|---|
| <input type="checkbox"/> Ovalized<br><input type="checkbox"/> Over/Under tolerance<br><input type="checkbox"/> Part Incorrect<br><input type="checkbox"/> Part Lost/Missing<br><input type="checkbox"/> Part Moved<br><input type="checkbox"/> Positioned Wrong<br><input type="checkbox"/> Power Loss/Surge | <input type="checkbox"/> Pressure/Forced<br><input type="checkbox"/> Temperature/Cure<br><input type="checkbox"/> Weld<br><input type="checkbox"/> Wrong Stock Pulled<br><input type="checkbox"/> Other |
|--|---|

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19/11/28

RLB-11-26

NCR: Yes / No

**WORK ORDER NON-CONFORMANCE / UPDATE**

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

**FAULT CATEGORY**

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |

# Picklist Print

September-23-13 11:48:22 AM

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Work Order ID: 107337

Parent Item: 646.3715

Parent Item Name: Strut Doubler

Start Date: 9/23/13

Required Date: 9/23/13

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP REV:A 12.10.22 NEW ISSUE DD VERF:JLM

| Component Item ID/<br>Item Name    | Replacement<br>Item ID | Mfg/<br>Purch | Bin<br>Item | Primary<br>Location | Last<br>Location | Route<br>Seq ID | Unit of<br>Measure | Qty on<br>Hand  | Qty per Kit | Total<br>Qty         | Qty<br>Issued | Date<br>Issued | Status |
|------------------------------------|------------------------|---------------|-------------|---------------------|------------------|-----------------|--------------------|-----------------|-------------|----------------------|---------------|----------------|--------|
| M6061T6S.040<br>6061-T6 .040 Sheet |                        | Purchased     | No          |                     |                  | 110             | sf                 | 260.0760        | 0.0434      | <del>0.0913684</del> |               | Ac 13.11.02    |        |
|                                    |                        |               |             | <u>Location</u>     |                  | <u>Loc Qty</u>  |                    | <u>Loc Code</u> |             |                      |               |                |        |
|                                    |                        |               |             | MAT021              |                  | 260.076         |                    |                 |             |                      |               |                |        |
|                                    |                        |               |             | <del>m126350</del>  |                  | 260.076         |                    |                 |             |                      |               |                |        |
|                                    |                        |               |             |                     |                  |                 |                    |                 |             | 126350               |               | → .352         |        |

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

|  |   |   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
|--|---|---|--------------------------------------|------------------------------------|------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|----------------------------------|--|------------------------------------|--|--------------------------------|------------------------------------|------------------------------------|-----------------------------------|--|
| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____ | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Work Order Update <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table> | Skid-tube <input type="checkbox"/>   | Crosstube <input type="checkbox"/> | Water Jet <input type="checkbox"/> | Engineering <input type="checkbox"/> | Machining <input type="checkbox"/> | Small Fab <input type="checkbox"/> | Prod. Eng. Coord. <input type="checkbox"/> | Quality <input type="checkbox"/> | Thermoforming <input type="checkbox"/> | Finishing <input type="checkbox"/> | Rec/Store/Packaging <input type="checkbox"/> | Other <input type="checkbox"/> | Large Fab <input type="checkbox"/> | Composite <input type="checkbox"/> | Supplier <input type="checkbox"/> |  |
| Skid-tube <input type="checkbox"/>                           | Crosstube <input type="checkbox"/>  | Water Jet <input type="checkbox"/>  | Engineering <input type="checkbox"/> |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Machining <input type="checkbox"/>                           | Small Fab <input type="checkbox"/>  | Prod. Eng. Coord. <input type="checkbox"/>  | Quality <input type="checkbox"/>     |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Thermoforming <input type="checkbox"/>                       | Finishing <input type="checkbox"/>  | Rec/Store/Packaging <input type="checkbox"/>  | Other <input type="checkbox"/>       |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |
| Large Fab <input type="checkbox"/>                           | Composite <input type="checkbox"/>  | Supplier <input type="checkbox"/>   |                                      |                                    |                                    |                                      |                                    |                                    |  |                                  |  |                                    |  |                                |                                    |                                    |                                   |  |

| Root Cause    | Date | Step | Qty | Description of work order update or Non-conformance | Initial Chief Eng | Action Description | Sign & Date | Verification | QC Inspector |
|---------------|------|------|-----|---|-------------------|--------------------|-------------|--------------|--------------|
| Doc/Data      |      |      |     |   |                   |                    |             |              |              |
| Equip/Tooling |      |      |     |   |                   |                    |             |              |              |
| Operator      |      |      |     |   |                   |                    |             |              |              |
| Material      |      |      |     |   |                   |                    |             |              |              |
| Setup         |      |      |     |   |                   |                    |             |              |              |
| Other         |      |      |     |   |                   |                    |             |              |              |
| Process       |      |      |     |   |                   |                    |             |              |              |
| Supplier      |      |      |     |   |                   |                    |             |              |              |
| Training      |      |      |     |   |                   |                    |             |              |              |
| Unapproved    |      |      |     |   |                   |                    |             |              |              |

### FAULT CATEGORY

| Landing Gear  | General                                 | Other  |
|---|---|--|
| <input type="checkbox"/> Bending                      | <input type="checkbox"/> Bend           | <input type="checkbox"/> Grain                           |
| <input type="checkbox"/> Centre Not Concentric to O/S | <input type="checkbox"/> BOM/Route      | <input type="checkbox"/> Hardware                        |
| <input type="checkbox"/> Cracks                       | <input type="checkbox"/> Broken/Damaged | <input type="checkbox"/> Inspection Incomplete           |
| <input type="checkbox"/> Crushed/Crimped              | <input type="checkbox"/> Burrs          | <input type="checkbox"/> Instructions Incomplete/Unclear |
| <input type="checkbox"/> Cuffs                        | <input type="checkbox"/> Contamination  | <input type="checkbox"/> Maintenance                     |
| <input type="checkbox"/> Heat Treat                   | <input type="checkbox"/> Countersink    | <input type="checkbox"/> Mislabeled                      |
| <input type="checkbox"/> Inspection Strip in Tube     | <input type="checkbox"/> Cut Too Short  | <input type="checkbox"/> Misread                         |
| <input type="checkbox"/> Ripples in Bend              | <input type="checkbox"/> Drill Holes    | <input type="checkbox"/> Offset                          |
| <input type="checkbox"/> Torque Waves in Extrusion    | <input type="checkbox"/> Drawing        | <input type="checkbox"/> Out of Calibration              |
| <input type="checkbox"/> Turning Sequence             | <input type="checkbox"/> Finish         | <input type="checkbox"/> Out of Sequence                 |
| <input type="checkbox"/> Wave/Twist in Tube           | <input type="checkbox"/> Folio          | <input type="checkbox"/> Outside Dimensions              |
|   |   | <input type="checkbox"/> Ovalized                        |
|   |   | <input type="checkbox"/> Over/Under tolerance            |
|   |   | <input type="checkbox"/> Part Incorrect                  |
|   |   | <input type="checkbox"/> Part Lost/Missing               |
|   |   | <input type="checkbox"/> Part Moved                      |
|   |   | <input type="checkbox"/> Positioned Wrong                |
|   |   | <input type="checkbox"/> Power Loss/Surge                |
|   |   | <input type="checkbox"/> Pressure/Forced                 |
|   |   | <input type="checkbox"/> Temperature/Cure                |
|   |   | <input type="checkbox"/> Weld                            |
|   |   | <input type="checkbox"/> Wrong Stock Pulled              |
|   |   | <input type="checkbox"/> Other                           |





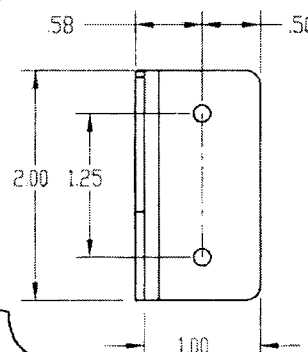
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|--|---|-------------------------|------------------------|-----------------------|---|--|
| APICAL<br>INDUSTRIES, INC.                                     | ENGINEERING CHANGE NOTICE NO. 03702                               |                         |                        |                       | SHEET 1 OF 2  |  |
|  | DWG NO. 646.3700  | REV: A                  | PREPARED BY B. PETERS  | DATE: 11/15/12        | EFFECT ON DWG<br><input type="checkbox"/> INC. <input checked="" type="checkbox"/> UNINC. |  |
|  | DWG TITLE: SHEETMETAL   |                         |                        |                       |   |  |
|  | APPROVED BY: <i>[Signature]</i>                                   | ENGR <i>[Signature]</i> | MFG <i>[Signature]</i> | QC <i>[Signature]</i> | EFF: NEXT ORDER   |  |
| TRANSACTION CODES (TC):<br>A-ADD C-CREATE<br>R-REVISE D-DELETE | REASON: ADDED ALTERNATE MATERIAL AND REVISED REFERENCE DIMENSIONS |                         |                        |                       | EOR: D-12-010   |  |

## SHEET 1, ZONE A2 IS:

IS

⚠ PRIMARY MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11  
ALTERNATE MATERIAL: SS 17-4 PH PER AMS 5604

IS

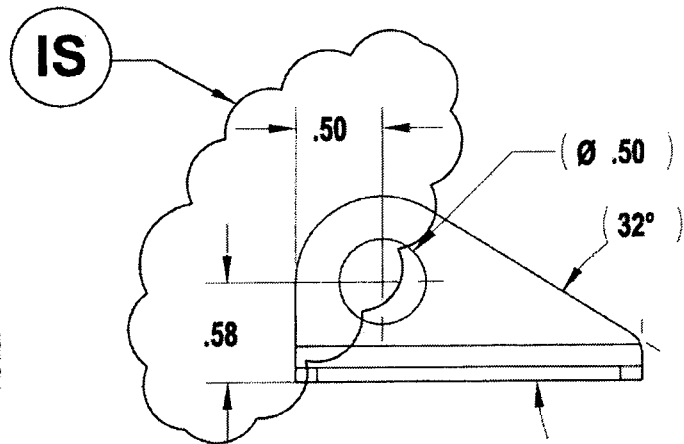


## SHEET 7, ZONE B1 IS:

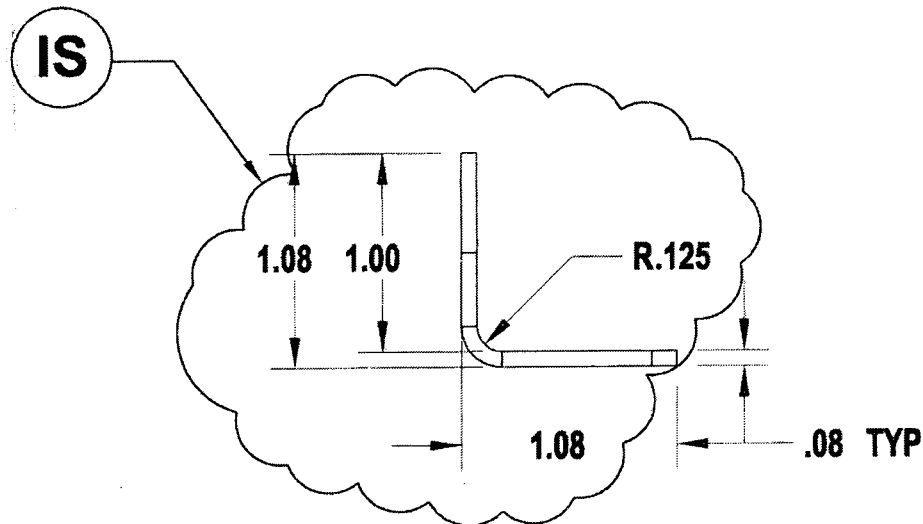
UN.  
S  
107337 MCD  
1309-25

| P/N                 | TC | PART NUMBER | QTY | DESCRIPTION   | MATERIAL  | SPECIFICATION  |
|---------------------|----|-------------|-----|---|---|--|
| DOCUMENTS EFFECTED: |    |             |     | <input type="checkbox"/> RFMS <input type="checkbox"/> MDL <input type="checkbox"/> INSTALL INSTRUC <input type="checkbox"/> ICA <input type="checkbox"/> BOM | CHANGE CATEGORY<br><input type="checkbox"/> MAJOR <input checked="" type="checkbox"/> MINOR | DER REVIEW REQUIRED<br><input type="checkbox"/> YES <input checked="" type="checkbox"/> NO |

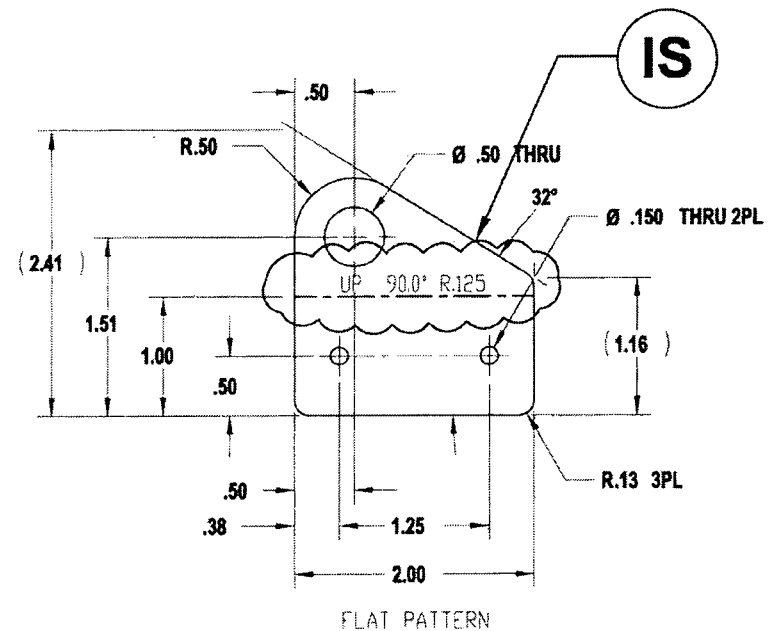
107337



**SHEET 7, ZONE C4 IS:**



**SHEET 7, ZONE D1 IS:**



**SHEET 7, ZONE B7 IS:**

| F/N | TC | PART NUMBER | QTY | DESCRIPTION | MATERIAL/SPECIFICATION |
|-----|----|-------------|-----|-------------|------------------------|
|-----|----|-------------|-----|-------------|------------------------|

| REPORT |                   |      |         |
|--------|-------------------|------|---------|
| REF.   | DESCRIPTION       | DATE | APPROV. |
| A      | UNCLASSIFIED COPY | 1988 | REF     |

1. MATERIAL: ALUMINUM 6061-T6 PER AMS-QQ-A-250/11
2. FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK;  
CARDINAL 4860-50 PRETREATMENT PRIMER  
PRIME IAW MIL-P-23377J TYPE I CLASS N
3. MATERIAL: 17-4 PH AMS 5604, CONDITION H900
4. FINISH: PRIME IAW MIL-P-23377J TYPE I CLASS N
5. DEBURR AND BREAK ALL SHARP EDGES
6. IDENTIFY IAW MPP-120

UNINCORPORATED ECN(S)

0370E

2  
B3

R21.88

.13

R79.57

79.28

| QTY | FIN D # | PART #   | DESCRIPTION   | MAT L | SPEC |
|-----|---------|----------|---------------|-------|------|
|     |         | 646.3719 | DOUBLER       | ↑     | ↑    |
|     |         | 646.3718 | CUSTOM WASHER | ↑     | ↑    |
|     |         | 646.3717 | DOUBLER       | ↑     | ↑    |
|     |         | 646.3716 | GAUGE BRACKET | ↑     | ↑    |
|     |         | 646.3715 | DOUBLER       | ↑     | ↑    |
|     |         | 646.3714 | GUSSET        | ↑     | ↑    |
|     |         | 646.3713 | GUSSET        | ↑     | ↑    |
|     |         | 646.3712 | CLIP          | ↑     | ↑    |
|     |         | 646.3711 | CLIP          | ↑     | ↑    |
|     |         | 646.3710 | DOUBLER       | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART #   | DESCRIPTION | MAT L | SPEC |
|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

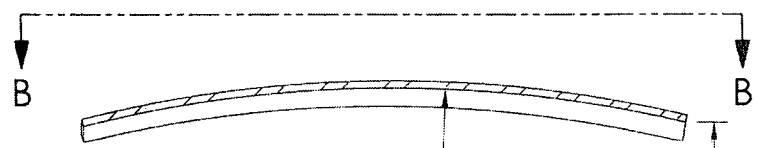
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|-----|---------|----------|-------------|-------|------|
| 1   |         | 646.3710 | DOUBLER     | ↑     | ↑    |

| QTY | FIN D # | PART # | DESCRIPTION | MAT L |
|-----|---------|--------|-------------|-------|
|-----|---------|--------|-------------|-------|

107737

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SECTION A-A



R395.138

R.13 4PL

13.51

10.49

10.54

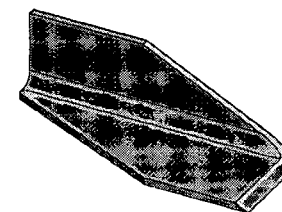
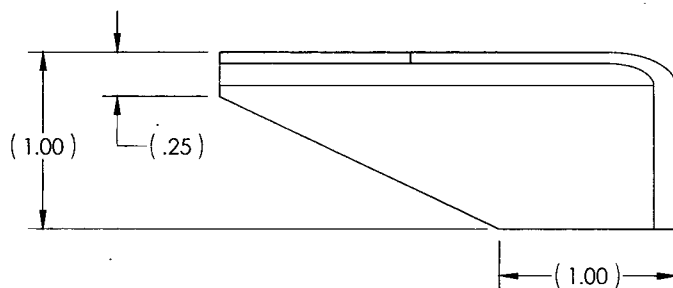
SECTION B-B

|                            |             |               |
|----------------------------|-------------|---------------|
| ORIGINAL DATE              | PROJECT NO. | DESIGN NO.    |
| DRAWN BY                   | CHECKED     |               |
| BY                         | DATE        |               |
| APPROVED                   | DATE        |               |
| CONTRACT NO.               |             |               |
| UNLESS OTHERWISE SPECIFIED |             |               |
| DIMENSIONS ARE IN INCHES   |             |               |
| TOLERANCES ARE             |             |               |
| FRACTIONS DECIMALS ±0.01   |             |               |
| ANGLES DECIMALS ±0.01      |             |               |
| STITCHES ± 1               |             |               |
| APICAL INDUSTRIES          |             |               |
| 2608 TEMPLE HEIGHTS DR.    |             |               |
| OCEANSIDE, CA. 92056-3512  |             | (760)724-5300 |
| SHEETMETAL                 |             |               |
| REV                        | DATE        | BY            |
| B                          | 07/16       | 646.3700      |
| SCALE NONE                 |             | SHEET 2 OF 9  |

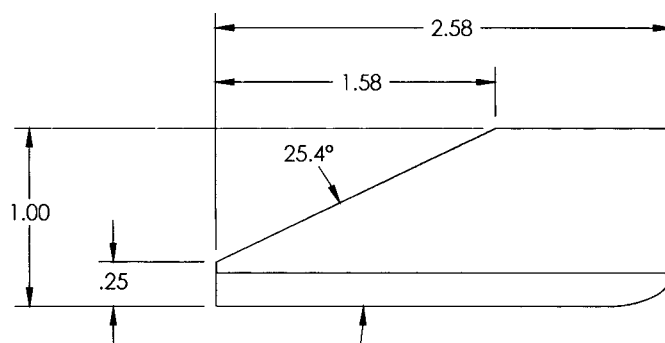
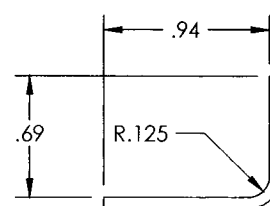
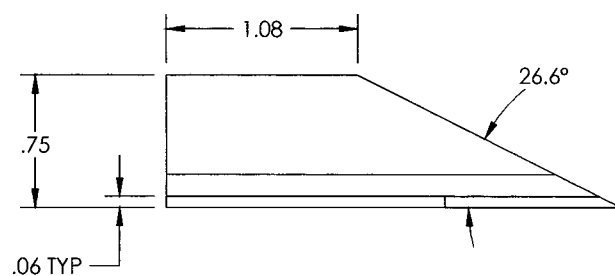
107337

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| REVISIONS |             |      |          |
|-----------|-------------|------|----------|
| REV.      | DESCRIPTION | DATE | APPROVED |
|           |             |      |          |

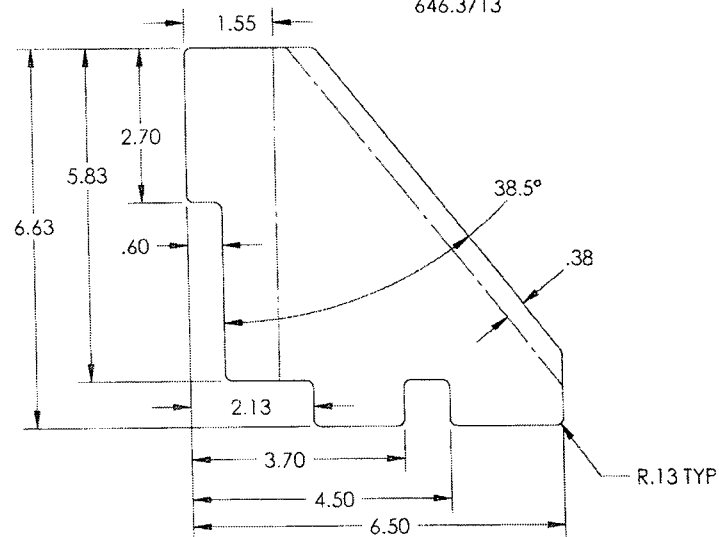
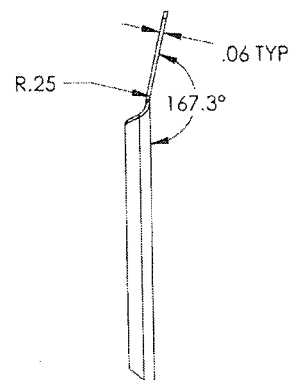
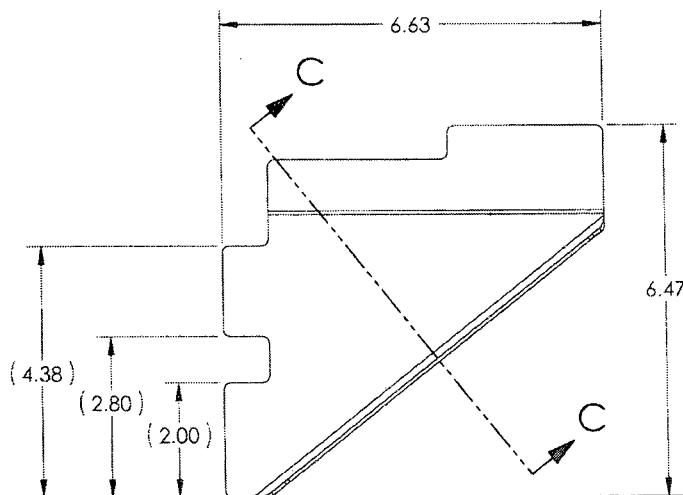
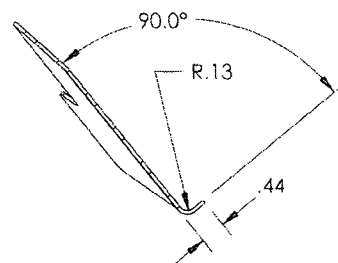


646.3711 SHOWN  
646.3712 OPPOSITE



|   |   |  |           |          |              |
|---|---|--|-----------|----------|--------------|
| NEXT ASSY (S)   | ORIGINAL DATE<br>08-19-08                 | <b>APICAL INDUSTRIES</b><br>2608 TEMPLE HEIGHTS DR.<br>OCEANSIDE, CA. 92056-3512 (760)724-5300 |           |          |              |
|   | DRAWN BY<br>P. BRAVO                      |  |           |          |              |
|   | CHECKED<br>S. JOSEPH                      |  |           |          |              |
|   | DRAWING APPROVAL<br>S. JOSEPH<br>08-19-08 |  |           |          |              |
| CONTRACT NO.  |   | <b>SHEETMETAL</b>  |           |          |              |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>TOLERANCES ARE:<br>1 PLACE DECIMALS ±.01<br>2 PLACE DECIMALS ±.005<br>ANGLES ±.5° |   | SIZE   | CAGE CODE | DWG. NO. | REV.         |
|   |   |  | 07/M26    | 646.3700 | A            |
|   |   | SCALE: NONE  |           |          | SHEET 3 OF 9 |

| PERSONS |             |      |          |
|---------|-------------|------|----------|
| REG.    | DESCRIPTION | DATE | APPROVED |

[illegible]

**APICAL INDUSTRIES**  
2606 TEMPLE HEIGHTS DR.  
OCEANSIDE CA. 92056-3512 (760)724-5300  
**SHEETMETAL**

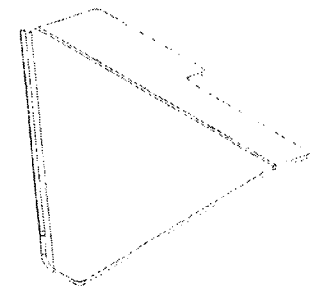
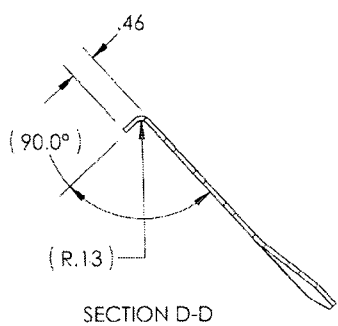
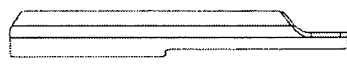
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|-------------|-----------|--------|--------------|----|
| SHEET       | CAGE CODE | QRC NO | 646.3700     | 27 |
| B           | 07M26     |        |              | 1  |
| SCALE: NONE |           |        | SHEET 4 OF 9 |    |



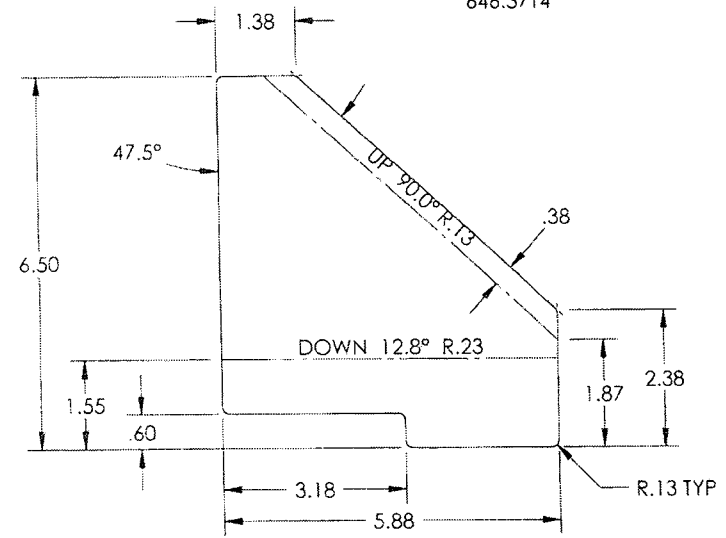
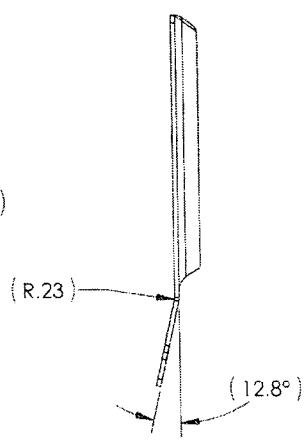
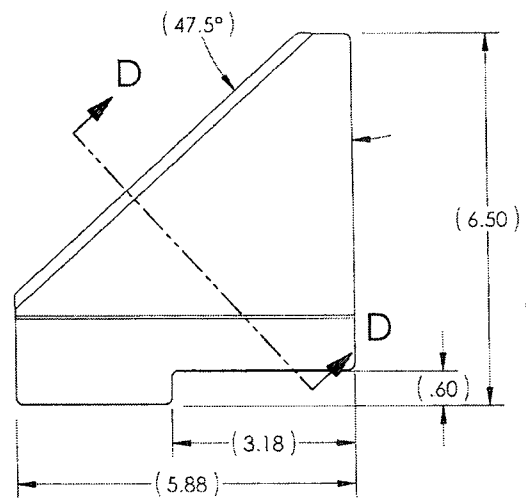


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| REV | DESCRIPTION | DATE | APPROVED |
|-----|-------------|------|----------|
|     |             |      |          |
|     |             |      |          |
|     |             |      |          |



646.3714

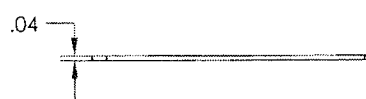
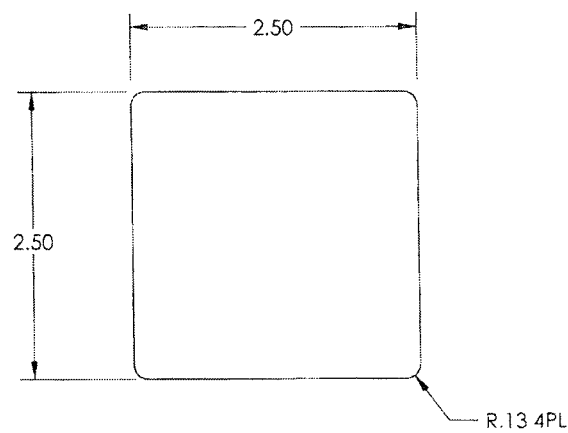


|   |  |  |  |
|---|--|--|--|
| ORIGINAL DATE: 06-08-00<br>DESIGNED BY: J. J. JENSEN<br>DRAWN BY: J. J. JENSEN<br>CHECKED BY: J. J. JENSEN<br>APPROVED BY: J. J. JENSEN |  | <b>APICAL INDUSTRIES</b><br>2608 TEMPLE HEIGHTS DR.<br>OCEANSIDE, CA 92056-3512 (760) 724-5300 |  |
| PART NAME: 646.3700<br>SCALE: 1/4"=1"   |  | <b>SHEETMETAL</b><br>SHEET 5 OF 9  |  |

107337

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| REVISIONS |             |      |          |
|-----------|-------------|------|----------|
| REV       | DESCRIPTION | DATE | APPROVED |
|           |             |      |          |



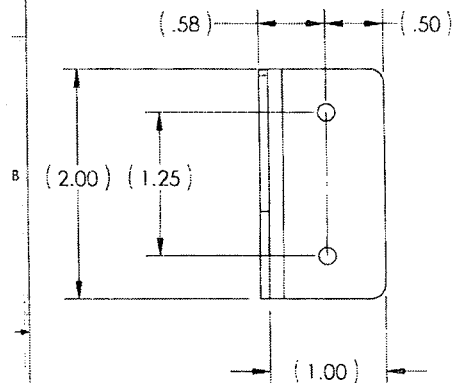
646.3715

|              |   |           |   |                     |
|--------------|---|-----------|---|---------------------|
| NEXT ASSY IS | ORIGINAL DATE   | 06-18-08  | <b>APICAL INDUSTRIES</b><br>2608 TEMPLE HEIGHTS DR<br>OCEANSIDE, CA, 92056-3512 (760)724-5300 |                     |
|              | DESIGNED BY   | JOE CRISP |   |                     |
|              | W. BRADY  | T. JOSEPH |   |                     |
|              | DRAWING APPROVAL  |           |   |                     |
|              | DATE  |           | <b>SHEETMETAL</b>   |                     |
|              |   |           |   |                     |
|              | UNITS: DIMENSIONS ARE IN INCHES<br>DIMENSIONS ARE<br>TYPICAL DIMENSIONS ARE<br>DIMENSIONS ARE |           | SHEET CODE<br>5 07M26   | DOW. NO<br>646.3700 |
|              | SCALE: 1:100  |           | SHEET 6 OF 9  |                     |

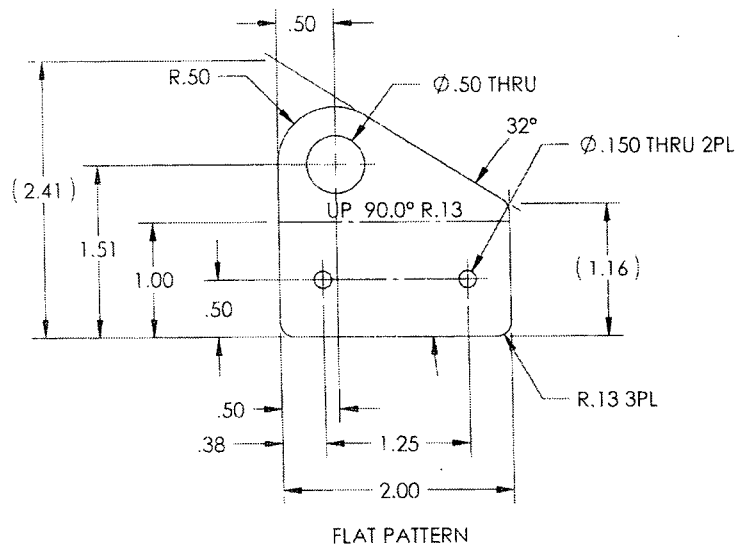
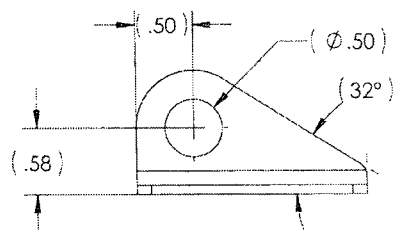
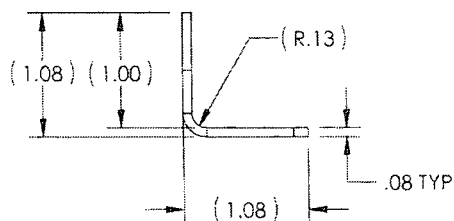
107337

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| REVISION |             |      |          |
|----------|-------------|------|----------|
| REV      | DESCRIPTION | DATE | APPROVED |
|          |             |      |          |



646.3716



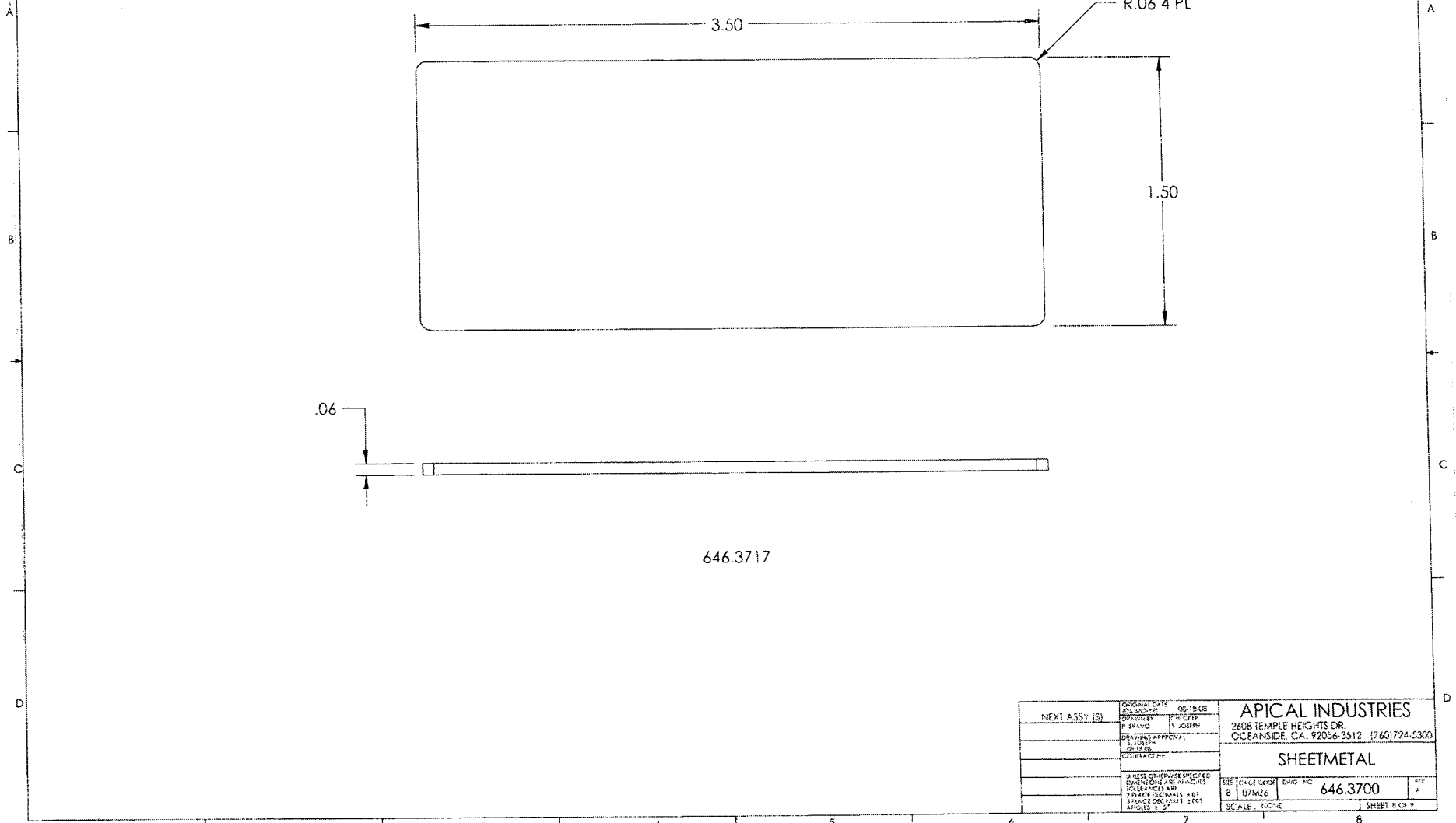
FLAT PATTERN

|                            |               |              |  |              |
|----------------------------|---------------|--------------|--|--------------|
| NEXT ASSY (S)              | ORIGINAL DATE | 06-18-03     | <b>APICAL INDUSTRIES</b><br>2608 TEMPLE HEIGHTS DR.<br>OCEANSIDE, CA. 92656-3512 (760) 724-5300<br><b>SHEETMETAL</b> |              |
|                            | DRAWN BY      | 10/00/03     |  |              |
|                            | CHECKED BY    | 10/00/03     |  |              |
|                            | DATE          | 10/00/03     |  |              |
| UNLESS OTHERWISE SPECIFIED | STANDARD      | ASME Y14.5   | SEE CHARGE CODE<br><b>B</b> 07/02/06<br>SCALE: 1:100   | SHEET 7 OF 9 |
|                            | FINISH        | AS SUPPLIED  |  |              |
|                            | WELDING       | AS SPECIFIED |  |              |
|                            | THREADS       | AS SPECIFIED |  |              |

107337

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| REV |  | DESCRIPTION | DATE | APPROVED |
|-----|--|-------------|------|----------|
|     |  |             |      |          |

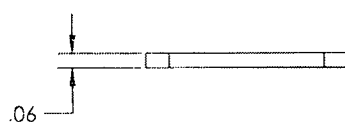
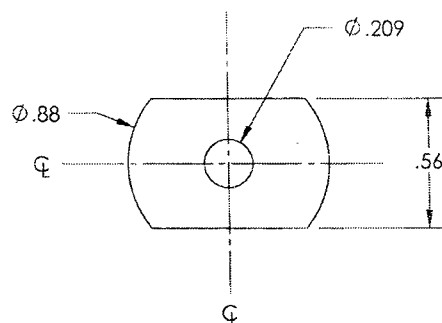


|  |                   |             |   |                   |        |
|--|-------------------|-------------|---|-------------------|--------|
| NEXT ASSY (S)  | ORGANIZATION DATE | 06-18-08    | <b>APICAL INDUSTRIES</b><br>2608 TEMPLE HEIGHTS DR.<br>OCEANSIDE, CA. 92056-3512 (760) 724-5300 |                   |        |
|  | DESIGNED BY       | J. JOSEPH   |   |                   |        |
|  | DESIGNED APPROVAL |             |   |                   |        |
|  | DATE              |             |   |                   |        |
| SHEETMETAL   |                   | SCALE: NONE |   | SHEET B.C.U.      |        |
|  |                   |             |   |                   |        |
|  |                   |             |   |                   |        |
|  |                   |             |   |                   |        |
| LIST OF REPAIRS SPECIFIED:<br>DIMENSIONS ARE IN INCHES<br>TYPICAL DIMENSIONS ARE<br>1/16" THICKNESS 2.00"<br>APPROVAL: S |                   |             | SIZE: 07M26   | PART NO: 646.3700 | REV: A |

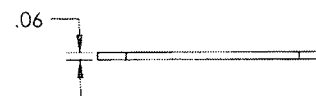
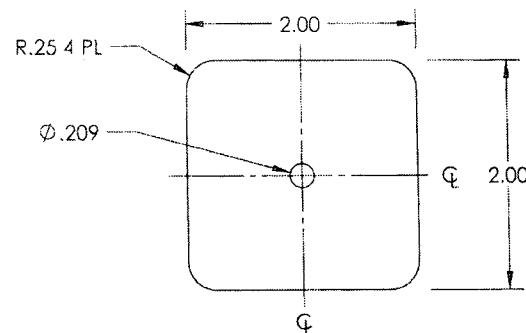
107337

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| REV | DESCRIPTION | DATE | APPROVED |
|-----|-------------|------|----------|
|     |             |      |          |



646.3718



646.3719

|   |               |          |   |     |
|---|---------------|----------|---|-----|
| NEXT ASSY. IS:  | ORIGINAL DATE | 03-18-05 | APICAL INDUSTRIES<br>2608 TEMPLE HEIGHTS DR.<br>OCEANSIDE, CA, 92056-3512 (760)724-5300 |     |
|   | DESIGNED BY   | CHILKAT  |   |     |
|   | DRAWN BY      | SDG/PH   | SHEETMETAL  |     |
|   | CHECKED BY    | SDG/PH   |   |     |
| UNLESS OTHERWISE SPECIFIED<br>DIMENSIONS ARE IN INCHES<br>FRACTIONS DECIMALS ANGLES<br>3/16 3/32 1/8 1/4 3/8 1/2 5/8 3/4 7/8 1 1 1/4 1 1/2 1 3/4 2 2 1/4 2 1/2 2 3/4 3 3 1/4 3 1/2 3 3/4 4 4 1/4 4 1/2 4 3/4 5 5 1/4 5 1/2 5 3/4 6 6 1/4 6 1/2 6 3/4 7 7 1/4 7 1/2 7 3/4 8 8 1/4 8 1/2 8 3/4 9 9 1/4 9 1/2 9 3/4 10 | DATE CODE     | 07/01/06 | 646.3700  | PPV |
|   | SCALE         | 1:1      |   |     |
|   | SHEET 2 OF 2  |          |   |     |
|   |               |          |   |     |



A.T.G. Industries Inc.  
731, rue Industrielle Rd.  
PLATING DEPARTMENT  
Rockland, On K4K 1T2  
Canada  
Ph: (613) 446-4544  
Fax: (613) 446-4556

### Pack List

Number: 62753

Date: 22-Nov-13

#### To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

#### Ship To

DART AEROSPACE LTD  
1270 ABERDEEN ST.  
HAWKESBURY, ON K6A 1K7  
Canada

Ph: 613-632-5200

Fax: 613-632-1185

Ph: 613-632-5200

Fax: 613-632-1185

| Terms   |   | Ship Via |  |
|---|---|----------|--|
| Quantity  | Description   |          |  |
| 1 lot   | Part: ASST<br>Rev:<br>10 PCS 646.3312 (12.05) ✓<br>12 PCS 646.3010 (10.25) ✓<br>6 PCS 646.3310 (18.10) ✓<br>2 PCS 645.3110 (10.65) ✓<br>4 PCS 646.3810 (6.55) ✓<br><u>32 PCS 646.3715 (6.70)</u> ✓ <i>st</i><br>38 PCS 646.3718 (3.95) ✓<br>6 PCS 646.9812 (22.80) ✓<br><br>HARD ANODIZE BLACK<br>MIL-A-8625 TYPE III CLASS 2<br><br>PRIME MIL-P-23377J TYPE I CLASS N<br><br>PRICE IS PER PIECE<br>Job: 20130724 PO: 21915 Line: |          |  |
| Certificate of Conformance  |   |          |  |
| A.T.G. Industries certifies that all items in this shipment are in conformance with all requirements, specifications and drawings referenced in the purchase order. |   |          |  |
| ISO 9001 : 2008 REGISTERED<br>ATG SALES-2010 TERMS APPLY  |   |          |  |
| DATE : <u>22/11/13</u>  |   |          |  |
| CERTIFIED SIGNATURE : <u><i>MA</i></u>  |   |          |  |
| RECEIVER SIGNATURE : _____  |   |          |  |